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ABSTRACT

Using both qualitative and quantitative data, the Office of Educational Assessment/Instructional Support Unit evaluated the 1985-1986 New York City Board of Education's Comprehensive Instructional Management Systems-Communication Arts (CIMS-CA) Project. The 1985-1986 CIMS-CA aimed to (1) implement an integrated communication arts program for grades 7 and 8, along with an assessment component, (2) continue elementary and junior high staff development, (3) complete revision to an integrated communication arts curriculum for grades 4 and 5, (4) pilot and revise assessment instruments for grades K through 6, (5) implement a computer management system, (6) implement a drama component for grades 4 through 8, and (7) continue to expand the project to allow for more participation by students, teachers, and administrators. Results indicated that participating students made statistically significant gains in holistically scored writing samples in grades 1 through 8. In addition, CIMS-CA students in grades 3 through 8 showed statistically significant reading gains overall on city-wide standardized tests in grades 3, 4, 5, and 8. Teachers viewed participation in staff development, test and curriculum design, and implementation as highly successful. Further, results indicated that the inclusion of grades 7 and 8 in the project proceeded smoothly and that curriculum revision for grades 4 and 5 was complete, and the first year of the drama component seemed to have been very successful. Finally, the number of students, teachers, and administrators participating in the program increased significantly. Among the recommendations based on these findings are to continue regular curriculum evaluation, to involve teachers directly in curriculum development, to maximize staff development and recruitment, and to extend the drama component for a second year. (JD)

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Evaluation Section Report
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COMPREHENSIVE INSTRUCTIONAL MANAGEMENT SYSTEM (CIMS) COMMUNICATION ARTS 1985-86

OEA Evaluation Report

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SUMMARY

The goals of the New York City Board of Education's Comprehensive Instructional Management Systems-Communication Arts (CIMS-CA) Project are to develop a holistic communication arts curriculum which reflects the most recent research for kindergarten through eighth grade, a staff development program, a corresponding test component, and a computer management system. Begun in 1980, the project has completed its sixth year. The curriculum and test component, developed by teachers, integrates the four content areas in communication arts -- reading, writing, listening, and speaking. For the 1985-86 school year, a drama component was added to the curriculum.

For 1985-86, the project was funded by a New York State legislative grant of $700 thousand. In addition, Community School Districts (C.S.D.s) 11 and 30 provided $80 thousand each, doubling their previous year's contribution, and C.S.D. 15 allocated office and work space as well as one teacher-trainer position. Participation among teachers in C.S.D.s 11, 15, and 30 increased 100 percent this year. In addition, C.S.D.s 13, 18, 20, 21, 22, and 24, as well as several non-public schools, continued to be informally affiliated with the project.

During 1985-86, the objectives for CIMS-CA were to:

- Implement an integrated communication arts program for grades seven and eight.
- Develop an assessment component to accompany the CIMS Communication Arts Curriculum for grades seven and eight.
- Continue to provide staff development for CIMS-CA teachers and administrators in elementary schools and in junior high schools in C.S.D.s 11, 15, and 30.
- Complete the revision of an integrated communication arts curriculum for grades four and five.
- Pilot and revise assessment instruments for grades K-six.
- Implement a computer management system.
- Implement a drama component for grades four-eight.
- Continue to expand CIMS-CA to allow for more student, teacher and administrator participation.

The New York City Board of Education's Office of Educational Assessment/Instructional Support Evaluation Unit (O.E.A./I.S.E.U.) conducted an evaluation of the program using both qualitative and quantitative data. Highlights of the major findings were as follows:

- Overall, participating students made statistically significant gains in holistically scored writing samples in grades one through eight. These gains were also educationally meaningful for grades one through five.

- CIMS-CA students in grades three through eight showed overall statistically significant reading gains on city-wide standardized tests in grades three, four, five, and eight.

- Teachers viewed participation in staff development, test and curriculum design, and implementation as highly successful.

- The inclusion of grades seven and eight in the project proceeded smoothly. Junior high school teachers were very positive about use of the CIMS-CA curriculum and participation in staff development.

- Curriculum revision for grades four and five was completed.

- The first year of the drama component was very successful.

- The number of students, teachers and supervisors/administrators participating in the program has significantly increased.

Based on these findings and other information contained in the report, the following specific recommendations are made:

- Continue to regularly evaluate and revise the curriculum.

- Continue to directly involve teachers in curriculum development and in assessment-instruments design.

- Continue to maximize staff development by providing more demonstration lessons, presentations by outside experts, and classroom visits by field managers. Continue monthly and summer workshops.

- Increase efforts to recruit more school staff into the project so that individual teachers gain additional support from colleagues and supervisors. Also, encourage more supervisor/administrator involvement.

- Continue to monitor the distribution and implementation of materials and of assessment instruments in order to assure their appropriate use.

- Plan, extend, and implement a second year for the drama component.

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I. INTRODUCTION

PROGRAM BACKGROUND

The primary goals of the New York City Board of Education's Comprehensive Instructional Management Systems Communications Arts (CIMS-CA)* Project are to develop (1) a holistic communication arts curriculum and staff development program which reflects the most recent research for kindergarten through eighth grade, (2) corresponding assessment instruments, and (3) a computer management system. The instructional curriculum and assessment instruments integrate the four content areas: reading, writing, listening, and speaking. The computer management system is designed to help organize and coordinate curriculum materials and assessment outcomes.

As in previous years, the project was funded primarily by a New York State Legislative grant. For 1985-86, $700 thousand was provided by this grant. In addition, Community School Districts (C.S.D.s) 11 and 30 provided $80 thousand each, double their 1984-85 contribution. C.S.D. 15 allocated both office and work space and one teacher-trainer position.

During the first four years of the program (1980-84), project staff developed both a communication arts curriculum and assessment measures for kindergarten through sixth grade. During the 1984-85 school year, curricula and assessment measures for junior high schools were developed.

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*This project, begun in 1980, was formerly called the Instructional Management Project in Communication Arts. For more information about previous years of project implementation, see New York City Public Schools' "An Evaluation of the Instructional Management Project in Communication Arts," MEDARP, 1981; "An Evaluation of the Instructional Management Project in Communication Arts," MEDARP, 1982; "An Evaluation of the Instructional Management Project-Communication Arts, 1982-83," MEDARP, 1983; and "Comprehensive Instructional Management Project-Communication Arts, 1983-84," Instructional Support Evaluation Unit, 1985.

During 1985-1986, the junior high school curricula and the assessment instruments were implemented. In addition, the fourth and fifth grade curricula were revised. Because an important aspect of the project has been that participating teachers themselves develop, revise, and implement all materials used for the CIMS-CA curriculum -- on the rationale that teacher-developed assessment tools provide more effective feedback for future revisions of the curriculum -- teachers participated in all curriculum development and assessment design this year, as they had done in previous years.

Other activities completed during the 1985-86 school year were the revision of assessment tools for kindergarten through the sixth grade, and the development of assessment tools for grades seven and eight. These assessment tools include end-of-theme tests designed to provide feedback on a weekly basis and writing tests.

POPULATION SERVED

During 1985-86, CIMS-CA operated in C.S.D.s 11, 15, and 30. This was the second year in the project for C.S.D.s 11 and 30; C.S.D. 15 had been participating since July, 1980. In addition, C.S.D.s 13, 18, 20, 22, and 24 were affiliated with the project. Several non-public schools also participated informally.

In 1985-86, over 18 thousand students participated in the project. This was the first year in which students in grades seven and eight participated in CIMS-CA.

PROGRAM OBJECTIVES

The CIMS-CA program objectives for the 1985-86 school year were to:

- Implement an integrated communication arts program for grades seven and eight.
- Develop an assessment component to accompany the CIMS-CA curriculum for grades seven and eight.
- Continue to provide staff development for CIMS-CA teachers and administrators in C.S.D.s 11, 15, and 30, and to include participants from the junior high schools.
- Complete the revision of an integrated communication arts curriculum for grades four and five.
- Pilot and revise assessment tools for kindergarten through sixth grade.
- Implement a computer management system.
- Implement a drama component for grades four through eight.
- Continue to expand the CIMS-CA project to allow for more student, teacher, and administrator participation.

PROGRAM EVALUATION

The purpose of the 1985-86 evaluation by the Office of Educational Assessment/Instructional Support Evaluation Unit (O.E.A./I.S.E.U.) was to document the level and quality of program implementation and to assess the program's impact on student achievement in reading and writing.

The evaluation focused on the program's activities in kindergarten through eighth grade in C.S.D.s 11, 15, and 30. The following methods were used to evaluate the program:

- Interviews with seven project staff members: the project coordinator, the research manager, and five staff development managers. The interviews focused on describing and/or assessing: each staff member's activities; project goals and administrative staff's perceptions of the achievement of these goals; program operation in each district; staff development efforts; assistance offered to teachers and administrators; curriculum and test development and test use efforts. The interviews also focused on the identification of the program's strengths and weaknesses and recommendations for the following year.

- A questionnaire (Teacher Users Survey) given to 105 teachers who had used the CIMS-CA curriculum. The Teacher Users Survey focused on: teachers' experience with the CIMS-CA curriculum; their perceptions of its usefulness; their plans for using the curriculum in the future; their ratings of staff development activities and of the drama component; and their identification of the program's strengths and weaknesses.

- Face to face interviews conducted with 30 CIMS-CA teachers participating in monthly staff development workshops. These individual interviews focused on the issues raised in the Teacher Users Survey. The interviews were used to elicit additional perceptions, more easily communicated via such dialogue.

- Observations of staff development workshops.

- Analyses of students' scores on standardized reading tests and holistically scored writing samples.

SCOPE OF THE REPORT

This report presents the results of the evaluation of the 1985-86 CIMS-CA program in six chapters. Project components and implementation are discussed in Chapter II. Staff reactions to and perceptions of the instructional component are presented in Chapter III. An evaluation of the drama component, based on teacher and student perceptions, is described in Chapter IV. Student outcome data are presented and analyzed in Chapter V, and conclusions and recommendations are offered in Chapter VI.

II. PROGRAM COMPONENTS

PROGRAM ADMINISTRATION

During 1985-86, CIMS-CA operated with seven staff members: a project coordinator, a research manager, and five staff development managers. The project coordinator supervised the CIMS-CA project and disseminated information about CIMS-CA activities to others.

In general, the staff development managers introduced the CIMS-CA project in their respective districts, acted as liaisons between the project and the district administrators, observed participating teachers, conducted model lessons in teachers' classrooms, and presided over teacher workshops. The research manager conducted assessment development workshops and helped implement the assessment program.

Of the five staff development managers, one each supervised CIMS-CA activities for teachers of kindergarten through sixth grade in C.S.D. 11, C.S.D. 15, and C.S.D. 30, respectively; one supervised the implementation of CIMS-CA in the seventh and eighth grades in C.S.D. 15; and one supervised the implementation of CIMS-CA in the seventh and eighth grades of both C.S.D.s 11 and 30.

CURRICULUM

The teacher-developed CIMS-CA curriculum for kindergarten through grade eight integrates all four content areas in communication arts: reading, writing, listening, and speaking. The curriculum provides concise educational objectives developed around thematic material which can be easily integrated with other subjects. In addition, it includes concrete teaching strategies. During 1985-86, a drama component emphasizing

listening, writing, and speaking was added to the fourth through eighth grade curriculum.

Major curriculum objectives for 1985-86 were: implementation of the newly developed CIMS-CA curriculum for the junior high schools; development of assessment tools to be used with this curriculum; completion of the revision of the curriculum for grades four and five; piloting and revision of the assessment instruments for kindergarten through grade six; and implementation of a drama component for grades four through eight.

Implementation of the Seventh and Eighth Grade Curriculum

In 1984-85, a curriculum to be used in the seventh and eighth grades was developed by CIMS-CA teachers. During 1985-86, this curriculum was implemented in C.S.D.s 11, 15, and 30. In addition, the CIMS-CA curriculum for the junior high school was used in those other districts which participated informally in the program. A total of 34 teachers were involved in implementation activities which included using the materials in the classroom, attending weekly workshops, assessing materials and offering suggestions for their revision, and participating in the drama component.

Revision of Curriculum for Grades Four and Five

Thirty-five elementary school teachers from C.S.D. 15 participated in the revision of the fourth and fifth grade curriculum. By the end of the school year, the curriculum had been revised, although additional work was scheduled for workshops for the following summer. The revised curriculum is expected to be available to CIMS-CA teachers for the 1986-87 school year.

INSTRUMENT DEVELOPMENT

An important component of the CIMS-CA Project is the use of teacher-developed assessment instruments. Initial workshops conducted by the research manager helped the teachers acquire test development skills. Two types of assessment tools were constructed: placement instruments and end-of-theme tests. The placement tests surveyed the skills of incoming students while the end-of-theme tests measured the learning of those students who had completed the sequential themes in the CIMS-CA curriculum. The goals of the test-development workshops were to: develop a test revision plan, review materials to be used in new tests, write test items, and share ideas about test revision to ensure that assessment tools matched intended outcomes for the curriculum on the various grade levels. For 1985-86, tests for grades seven and eight were developed, and end-of-theme tests for grades four and five were revised.

Placement Tests

One objective of the instrument-development component was the construction of an assessment tool for each grade which would enable teachers to identify the level and skills of students beginning the CIMS-CA curriculum. In the 1985-86 school year, a test to identify the listening and speaking skills of students from kindergarten through grade eight had been developed, with revisions scheduled for the summer of 1986. During 1985-86, placement tests were used only in C.S.D. 15. These placement tests will be used in other CIMS-CA districts during the 1986-87 school year.

End-of-Theme Tests

Teachers also worked on the revision of end-of-theme tests for grades kindergarten through six and in creating such tests for grades seven and eight. For all grades (kindergarten through eight), three themes were covered in the CIMS-CA curriculum at each grade level. These tests were designed to help teachers identify students' strengths and weaknesses in reading, speaking, listening, and writing; select the appropriate theme to be used next for classroom instruction; and plan lessons. End-of-theme tests consisted of three components: a reading comprehension component; a listening and speaking component in which students were asked to respond orally; and a writing component. All test items reflected desired CIMS-CA outcomes. As was the case with the placement tests, end-of-theme tests were used largely in Community School District 15. The other participating districts used the CIMS-CA curriculum without the test component.

Developing Assessment Tools For Grades Seven and Eight

Assessment tools for grades seven and eight were developed by 20 junior high school teachers. These tools included two types of instruments: end-of-theme tests and survey tests of students' communication abilities. Assessment development was overseen by the project's research manager and a consultant from the faculty of New York University's School of Education. By the end of the school year, assessment instruments for the junior high school had been developed, with revisions scheduled for the summer of 1986.

Piloting and Revision of Assessment Instruments for Grades Kindergarten through Six

Assessment instruments for kindergarten through grade six included end-of-theme tests and survey tests of students' communication abilities. Thirty-five elementary school teachers worked on the revision of these instruments under the supervision of the research manager, with the help of the N.Y.U. consultant. By the end of the school year, the assessment tools were completed. Piloting of the survey tests began in C.S.D. 15 during spring 1986. The end-of-theme tests will be available for more general use for the 1986-87 school year.

COMPUTER MANAGEMENT SYSTEM

The computer management system functions to provide teachers with prompt test results, to facilitate instructional planning, and to give administrators information useful for monitoring communication arts instruction for long range educational planning. The development of the CIMS-CA computer management system began in 1984-85 and was completed in 1985-86. The computer management system was piloted during late spring, 1986.

For each survey instrument and each end-of-theme test, on every grade level, the following reports can be generated: class matrix and student individual reports in reading, listening, speaking, and writing. Additionally, parent reports, archive reports, and end-of-year reports can be generated. The reports provide data on mastery of outcomes, teacher ratings on listening/speaking performance tasks, and writing sample ratings. Staff development workshops on the interpretation of test data were to be held in the summer of 1986 as well as during the 1986-87 school year.

STAFF DEVELOPMENT ACTIVITIES

During 1985-86, CIMS-CA staff development consisted of site visits, demonstration lessons, workshops, and observations by project staff of teachers in order to provide feedback and assistance. In addition, project staff sponsored workshops on curriculum and test development. Summer 1985 workshops were scheduled for new CIMS-CA teachers as well as for both those working on revisions of the curriculum for grades four and five and on continued development of the junior high school curriculum and tests. In addition, workshops focused on the effective use of the computer management system.

Staff Development in C.S.D. 15

According to the report of the staff development manager, nearly 300 elementary and junior high school teachers in C.S.D. 15 used the CIMS-CA curriculum. Of these 300, 25 junior high school teachers and elementary school teachers participated in ongoing staff development, which consisted of school-based faculty conferences, grade level conferences, individual meetings with teachers, demonstration lessons, presentations of new materials and how to use them, classroom observations to help teachers use the CIMS-CA materials in the best possible way, and weekly meetings both for curriculum and test development and to share ideas on how to make the curriculum more effective. Junior high school teachers were involved in assessing and suggesting revisions of the new junior high school curriculum. Other teachers either used the curriculum informally or had participated in staff development in the past.

Staff Development in C.S.D.s 11 and 30

With the exception of the test component function, staff development in these districts was similar to that of C.S.D. 15. In C.S.D.s 11 and 30, 29 junior high school teachers and 65 elementary school teachers were involved in staff development activities. Approximately 80 other teachers had attended staff development activities during the previous year and during the summer of 1985. During the school year, curriculum implementation workshops were held bi-monthly. They presented information about a variety of curriculum applications and variations, including adapting the curricula for English as a Second Language Students (E.S.L.), techniques of writing, semantic mapping, using newspapers in the curriculum, using poetry and literature, and theatre appreciation. In addition, specialists in communication arts teaching appeared as guest speakers.

Some school administrators participated in the 1985 summer workshops. Others met with field managers periodically for updates on project progress and goals. Although administrators were invited to a CIMS-CA orientation meeting during the 1984-85 school year, no such meeting was held this year. Instead, administrators were involved with the project through contact with their CIMS-CA teachers, through communications with CIMS-CA project staff, and by work with district superintendents. Some administrators were extremely enthusiastic about and involved in project activities, whereas others were not. Given the variable participation of school administrators, a goal for CIMS-CA field managers in these districts next year will be to enhance administrators' involvement in the project. Field managers agreed that implementation of the CIMS-CA curriculum proceeds more smoothly within the individual schools when school administrators are supportive; in

addition, positive administrator involvement enhances teacher recruitment efforts.

III. REACTIONS TO AND PERCEPTIONS OF THE INSTRUCTIONAL COMPONENT

STAFF PERCEPTIONS OF CIMS-CA'S ADAPTABILITY AND EFFECTIVENESS

In workshop sessions, CIMS-CA teachers were asked to respond to survey questions concerning the curriculum's effectiveness and its capacity to be adapted to meet students' individual needs. Respondents were asked whether the curriculum promoted the goals of CIMS-CA: integrating the skills of listening, speaking, reading, and writing. Table 1 summarizes these data. Of the sample of 110 respondents, a vast majority (89 percent) agreed that it did. When asked to rate the appropriateness of the curriculum to the interests of their students, over half of the teachers (54 percent) agreed that it was very appropriate; while an additional two fifths thought it was moderately appropriate. Teachers of grades one, six, seven, and eight were more likely than teachers of kindergarten and of grades two through five to have thought that it was only moderately appropriate.

CIMS-CA teachers were asked to evaluate the capacity of the curriculum to be adapted to the skill levels of individual students. Most of the respondents believed it was very adaptable (54 percent), or it was moderately adaptable (41 percent). Fifth grade teachers were the most likely to think that it was only moderately adaptable; there was no perceptible pattern of responses to this question among the other teachers.

Teachers were asked if they would use the CIMS-CA curriculum during the following year if they had a choice. A great majority, (91 percent) stated that they would. The overwhelming response from teachers was that they wished to be included in the following year's CIMS-CA Project.

TABLE 1

Ratings[a] for Adaptability and Effectiveness of the CIMS-CA Curriculum (N=110)

Variable	Mean	S.D.
1. Integratedness of Curriculum	1.1	.3
2. Appropriate to Interests of Students	1.4	.6
3. Adaptability for Students with Varying Skills Levels	1.5	.6
4. Relevance of Social Studies Curriculum	1.9	.9
5. Relevance of Science Curriculum	2.4	1.0

[a] All questions were rated on a four-point scale with 1=highest to 4=lowest.

- Teachers were enthusiastic about the integratedness of the CIMS-CA curriculum, its appropriateness to students' interests, and its adaptability to student skill levels.

CURRENT USE OF CIMS-CA

Participants were asked to describe their current use of CIMS-CA. The majority of teachers in C.S.D.s 15 and 30 stated that they used the CIMS-CA curriculum as a supplement to other materials. The most frequent reason for this use of the curriculum was teachers' concern that CIMS-CA did not cover all the mandated areas for their grade levels. Teachers in C.S.D. 11 were more likely than those from the other two districts to use the CIMS-CA curriculum equally with other materials. In all three districts, junior high school teachers used the CIMS-CA curriculum primarily.

REACTIONS TO STAFF DEVELOPMENT

Teachers were asked to evaluate the extent to which they found helpful the training in using the curriculum. A majority (72 percent) of the teachers thought the training was very helpful. Most teachers thought the project gave them as much assistance as they needed; most appreciated the opportunity provided in weekly and biweekly meetings to exchange ideas and learn new teaching techniques. Teachers from all three districts cited as exceptionally useful the visits from staff developers. In addition, teachers rated very positively the training they received in using the drama component (Chapter IV discusses this aspect of CIMS-CA more fully).

Teachers were asked to rate the effectiveness of the help they received from people other than the CIMS-CA staff. These ratings are summarized in Table 2. According to this table, other CIMS-CA teachers were found to be the most helpful; next came district curriculum developers.

TABLE 2

CIMS-CA Teachers' Ratings[a] of
Helpfulness of People Other Than CIMS-CA Staff

Other People	Mean	S.D.
1. District Curriculum Developers	3.0	1.1
2. Other Experienced CIMS-CA Teachers	2.7	1.2
3. School Supervisors	3.3	1.0

[a]Responses were rated on a four-point scale from 1=very much to 4=not at all.

- Other experienced teachers, followed by district curriculum developers were the most helpful in helping teachers in using the curriculum.

STAFF PERCEPTIONS OF THE PROGRAM'S MAJOR STRENGTHS

The following perceptions of program strengths and weaknesses were extracted from responses to open-ended questions on the survey forms. Since not all respondents completed the open-ended questions, these responses do not necessarily represent the majority of teachers and field manager opinions. They are included because they offer valuable insights regarding program strengths and weaknesses that would otherwise be lost if only quantitative data were used.

Junior High School Teachers

Junior High School teachers (N=26) cited the following as major strengths of the CIMS-CA project: (1) the use of thematic formats in the curriculum (N=12); (2) workshops which were informative and allowed for teachers to communicate with each other (N=15); (3) the inclusion of good literature in the curriculum (N=7); (4) progressive skill building in the curriculum (N=3); and (5) high student interest, which encourages students to do more work (N=3).

Elementary School Teachers

Elementary school teachers (N=84) also liked the thematic approach and the child-centered activities. They believed that: the curriculum appealed to children and was easy to follow (N=58), and the lessons were varied (N=52); the listening component and the drama component were unique (N=30); the CIMS-CA curriculum encouraged logical thinking; and the curriculum included good literature (N=30).

Field Managers

Field managers agreed that staff development was a major strength of the project. They thought very valuable the increased communication among teachers, encouraged during the weekly and bi-weekly workshops. Field managers also cited the following factors as major strengths of CIMS-CA: (1) the role of teachers in creating and assessing the curriculum; (2) the effective use of research to aid in curriculum revision; (3) the high student interest in a relevant curriculum; (4) the use of high quality literary materials; and (5) the drama component.

STAFF PERCEPTIONS OF THE PROGRAM'S MAJOR WEAKNESSES*

Junior High School Teachers

Weaknesses cited by junior high school teachers included the need for: (1) a grammar component (N=2); (2) improved writing lessons (N=2); (3) greater teacher involvement, especially in designing the drama component (N=3); and (4) a more attractive format for student resource books (N=5).

Elementary School Teachers

Weaknesses noted by elementary school teachers included: (1) lessons which often were too long for the attention span of children (N=4); (2) lessons which included too much material (N=3); (3) not enough variety in lesson content (N=3); and (4) unattractive books (N=4). Also, some elementary school teachers thought more site visits from field managers were needed to provide demonstration lessons and for classroom observations (N=7). Teachers from schools in which there were few CIMS-CA participants

*It must be noted that, in general, there were more positive than negative comments.

cited a need for greater support on the school level (N=3); they believed that more intensive recruitment efforts and more administrator involvement would improve effective implementation.

Field Managers

With this year's expansion of the program, field managers found it difficult to make all the site visits they thought necessary. One field manager summed up the problem: "We really need more of us." The need for increased commitment from school administrators was also noted. According to field managers, optimal performance of the project in any one school depended on the involvement and support of key school administrators.

Project Coordinator

The project coordinator was disappointed that the computer management system was not in place until the last month of the school year. Difficulty with software development was cited as the major factor in the delay.

IV. THE CIMS-CA DRAMA COMPONENT

DRAMA COMPONENT OVERVIEW

This component was added to the program in 1985-86. Teachers in grades four through eight in C.S.D.s 11, 15, and 30 participated in the Drama Component of CIMS-CA. All of the related activities were performed in conjunction with the Theatre for a New Audience (TFANA) and with Equity Group, whose services are contracted through the Board of Education.

The Drama Component goals included: introducing students to the world of William Shakespeare; increasing students' understanding and appreciation of the theatre; providing children with an opportunity to view a play; encouraging creative expression using The Tempest as its medium; and allowing students to perform for an audience.

Of the four phases of the drama component, the first was preparation for seeing Shakespeare's The Tempest. Copies of a specially prepared, abridged edition of the play were given to participating teachers. In addition, members of TFANA conducted workshops to help teachers prepare their students, so that their understanding and enjoyment of the play might be increased. Teacher preparation included: reading and discussing supplementary materials explaining the plot; developing and distributing lesson plans to teach about Shakespeare's use of language and the historical background of his plays; and showing the teachers games designed to acquaint students with how a play is produced. The expectation was that teachers would use these resources with their classes.

The second phase of the drama component was the trip to a performance of The Tempest. The teachers and their classes attended the TFANA production at the City Stage Theatre.

The third phase of the drama component was the creation of versions of The Tempest by each participating class. Members of TFANA visited each classroom and helped students prepare for their performances.

The fourth phase of the drama component was the CIMS-CA Shakespeare Festival, at Damrosch Park in Lincoln Center. All classes performed their play segments at the Festival.

PERCEPTIONS

Teachers' Perceptions

Fifty-five teachers of grades four through eight who participated in CIMS-CA were either interviewed or surveyed about the drama component. Two thirds of the participating teachers thought the information and materials supplied by the project to enrich the drama component experience were "very useful." Another 20 percent found these materials to be "moderately useful," and 14 percent claimed they were "minimally useful." No teacher in the sub-sample stated that the information and materials were "not useful."

In response to a question on the effectiveness of the drama component in enriching children's understanding of The Tempest, 42 of the 55 participating teachers thought it was "very effective," the highest rating on the O.E.A. questionnaire.

The majority of participants (82 percent) found the theatre component to be very useful and very effective. The following are among the many positive comments:

> "My kids went around spouting Shakespeare. It was great." (6th grade)
>
> "Most kids had little conception of what Shakespeare was. Most had never seen a play at all. All enjoyed it." (8th grade)

"Students liked it, and understood it, but going to see it helped." (6th grade)

"It exposed children to classical literature and drama. They were encouraged to create their own theatrical piece. It was useful." (5th grade)

"Great! They loved Shakespeare. It was a wonderful opportunity for kids to express themselves." (4th grade)

"One of my students said, 'I understand Shakespeare. It's a lot of work. You have to be smart to do Shakespeare.' He is one of my slower students. The drama lesson allowed him to be a star." (6th grade)

While most teachers were enthusiastic about the drama component, nine junior high school teachers had some difficulty in implementing it. Finding age-appropriate materials and dealing with scheduling conflicts were their major concerns. Four teachers thought that copies of the play should have been available to students; however, this suggestion conflicts with the goals of the drama component: the enhancing of skills in listening, speaking, and writing. In addition, some teachers reported school-level difficulties with organization of the field trip. The general agreement was that although there is room for improvement, the first year of this ambitious component went quite well.

Project Staff's Perceptions

Project staff, including the director and the research manager, were all pleased with the drama component's first year. All five field managers rated the drama component as "very useful," giving it the highest rating on the O.E.A. questionnaire.

As with other aspects of the CIMS-CA project, the drama component was most successful in schools where administrators were the most supportive. The project staff was unanimous in calling for more support from prin-

cipals, assistant principals, and supervisors. It was noted that some school administrators were more encouraging than others in allowing class time for the drama component. In some schools, assemblies were held in which the children performed segments from The Tempest. Such cooperation was lauded by the project staff as supportive of cultural enrichment. As one project staff person stated, "We (the project) can provide materials but the principal has to do his or her part too. In some schools it's fine, but in others we need more cooperation."

Among the project staff, there was consensus that the drama component had succeeded. All looked forward to the second year, when more coordination between CIMS-CA and school administrators would make the theatre project an even greater success.

Children's Perceptions

While O.E.A. did not systematically gather information from students on their reactions to the drama component, a series of comments was excerpted from letters written by elementary and intermediate school students. Some examples of their comments were:

> "I love(d) the play. It had funny parts and scary parts...I liked how they acted and when the light went out I got so scared I held the hands of people next to me."
>
> "(The part) I liked best was when the spirit came out and started singing. She has such a beautiful voice. I would love to see Romeo and Juliet."
>
> "I enjoyed going to the play and learning about the play, The Tempest, that I've never seen before. I never could believe me learning a play written by William Shakespeare."
>
> "The lessons in class helped me a lot because the way they began. I knew what the background was. As soon as they said something, I knew what was going on. Some lines I recognized because we said them in class. The sound effects were good."

The excerpts qualitatively illustrate the impact of the enrichment project on these children. They were expressing their appreciation for both the preparatory lessons and exposure to the play.

V. STUDENT OUTCOMES

METHODOLOGY

The effect of the CIMS-CA program on student achievement was determined by examining the change in participating students' reading and writing performance between 1985 and 1986. Students participating in the program were identified by those teachers who used the CIMS-CA curriculum during the 1985-86 school year. Pre-post comparisons of changes in student achievement by district and by grade were made on standardized reading achievement tests and holistically scored writing samples. Reading analyses included all CIMS-CA participants, while the writing analyses were conducted on a sample of participants.

Reading

In order to measure the impact of the CIMS-CA curriculum on students' reading achievement, CIMS-CA students' scores on citywide standardized reading tests administered in spring, 1985, were compared to their scores on reading tests administered in spring, 1986. During spring, 1986, however, new tests were administered as part of the citywide reading program; thus, for grades three and six, tests administered in 1985 were different from those administered in 1986. For these two grades, 1986 reading scores on the Degrees of Reading Power test series (D.R.P.) were converted to comparable test scores on the California Achievement Test (CAT) which was administered in 1985.* For grades four, five, seven, and

*Tables for converting test scores were generated with the equipercentile method in which frequency distributions of scores on both tests were equated.

eight, no conversion was needed since D.R.P. was administered in both 1985 and 1986. The majority of participating students whose scores were included in the analyses were from C.S.D.s 11, 15, and 30 (N=1,455); the remaining CIMS-CA students were from C.S.D.s 18, 21, 22, and 24 (N=125). These additional districts were combined for analyses and are referred to in this report as "assorted districts."

All analyses of reading achievement were performed on students' reading normal curve equivalent scores (N.C.E.s)* in grades three through eight. Correlated t-tests were used to determine whether the reading test scores of CIMS-CA students were significantly higher in 1986 than in 1985. Reading improvement was operationally defined as statistically significant increases in students' N.C.E. scores from 1985 to 1986. Statistical significance indicates whether the changes in achievement are real or occur by chance. However, statistical significance can be exaggerated by large sample size or depressed by small sample size. Furthermore, statistical significance does not address the issue of whether the achievement changes are important to the students' educational development. Thus, an effect size (E.S.)** is reported for each comparison to indicate the educational

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*N.C.E. scores are similar to percentile ranks but, unlike percentile ranks, are based on an equal-interval scale. N.C.E. scores are based on a scale ranging from one to 99 with a mean of 50 and a standard deviation of approximately 21. Because N.C.E. scores are equally spaced apart, arithmetic and statistical calculations such as averages are meaningful; in addition, comparisons of N.C.E. scores may be made across different achievement tests.

**The effect size, developed by Jacob Cohen, is the ratio of the mean gain to the standard deviation of the gain. This ratio provides an index of improvement in standard deviation units irrespective of the size of the sample. According to Cohen, 0.2 is a small E.S., 0.5 is a moderate E.S., and 0.8 is considered to be a large E.S. Only effect sizes of 0.8 and above are considered to be educationally meaningful, reflecting the importance of the gains to the students' educational development.

meaningfulness of each mean gain or loss independent of the sample size. In addition, analyses of covariance were performed on students' 1986 reading test scores to determine whether reading achievement differed significantly among various districts and grades; pretest scores obtained in 1985 were used as a covariate to control for initial differences in reading achievement.

Writing

To assess CIMS-CA students' improvement in writing skills from 1985 to 1986, samples of student writing were collected both during fall, 1985, and spring, 1986. Matched writing samples from 533 students (i.e., they included both fall, 1985, and spring, 1986, writing samples for each student) were randomly selected by grade and district from the total number of writing samples collected. These samples were holistically scored, and correlated t-tests were used to determine statistical significance of the difference between the fall, 1985, and spring, 1986, scores on the writing samples.

The following groups were included in the analysis:

- o grades one to eight in C.S.D.s 11, 15, and 30; and
- o grades five, seven, and eight in C.S.D.s 22 and 24*.

Statistical significance of changes from 1985 to 1986 are reported for each grade within each district. Again, an effect size (E.S.) is reported as an

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*Of the districts that used the CIMS-CA curriculum for the first time during 1985-86 school year (C.S.D.s 18, 13, 20, 22, 21, 24) only C.S.D.s 22 and 24 submitted both pre- and post- writing samples for participating students. These two districts will be referred to in the discussion of the data, below, as "assorted districts."

indicator of the educational meaningfulness of the mean gain or loss for each comparison. In addition, analyses of covariance were conducted to determine whether there were any statistically significant differences in writing achievement among different grades and districts.

RESULTS IN READING ACHIEVEMENT

A comparison of mean gains in reading scores between spring, 1985, and spring, 1986, of all CIMS-CA students, by grade and with all school districts combined in grades three through eight is presented in Table 3. This table shows that there was an overall statistically significant reading mean increase of 2.5 N.C.E.s from 1985 to 1986. Grades three, four, and five also showed statistically significant reading increases. Grades six and seven reading scores remained unchanged from 1985 to 1986. Of these changes, grades four and eight showed a moderate effect size, whereas the overall mean difference and the changes in grades three and five represented a small effect size.

Tables 4 through 7 present similar comparisons for grades three through eight in C.S.D.s 11, 15, and 30 and for assorted districts (22 and 24). As shown in these tables:

- C.S.D. 11 showed an overall non-significant reading mean gain of 0.9 N.C.E.s. Grades five and seven increased their reading mean scores significantly. These changes represented moderate to moderately large effect sizes.

- C.S.D. 15 showed an overall statistically significant reading mean gain of 3.4 N.C.E.s. This gain represented a small effect size. Students in grades four, five, six, and eight made statistically significant reading increases. These increases represented small to moderate effect sizes.

- C.S.D. 30 showed an overall statistically significant reading mean gain of 2.9 N.C.E.s. This gain represented a small effect size. Grades three, four, and seven made statistically significant

TABLE 3

Analyses of CIMS-CA Reading Achievement
for All C.S.D.s Combined: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
3	294	50.6	20.4	53.7	22.4	3.1[a]	15.7	.2
4	293	58.7	14.6	63.6	14.7	4.9[a]	10.8	.5
5	251	58.7	13.9	61.9	11.6	3.2[a]	9.6	.3
6	304	60.1	16.6	60.7	15.8	0.6	10.6	.1
7	249	63.4	11.5	63.1	11.5	0.3	9.4	.0
8	189	61.4	12.9	64.6	11.5	3.2[a]	7.8	.4
Total	1,580	58.5	16.0	61.0	15.9	2.5[a]	11.3	.2

[a] These differences were statistically significant at $p<.05$.

- o There was an overall reading increase of 2.5 N.C.E.s This change was statistically significant, but not educationally meaningful.

- o Students in grades three, four, five and eight also showed statistically significant reading increases; the gain for grade four was moderately meaningful.

TABLE 4

Analyses of CIMS-CA Reading Achievement Scores
for C.S.D. 11: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
3	111	59.9	17.1	61.2	23.0	1.3	16.3	.1
4	63	47.7	13.0	49.6	15.5	1.9	12.7	.1
5	83	50.1	13.7	54.8	11.6	4.7[a]	12.5	.4
6	102	57.7	15.3	56.9	14.6	-0.8	10.7	.1
7	134	66.4	9.7	65.1	10.5	-1.3	9.6	.1
8	22	61.9	7.6	66.8	6.0	4.9[a]	7.1	.7
Total	515	58.2	15.1	59.1	16.3	0.9	12.4	.1

[a] These differences were statistically significant at $p<.05$.

- C.S.D. 11 showed an overall reading increase of 0.9 N.C.E.s. This change was not statistically significant.
- Statistically significant increases were found in grades five and eight; the gain for grade eight was meaningful.

TABLE 5

Analyses of CIMS-CA Reading Achievement
for C.S.D. 15: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
3	112	42.9	20.2	45.2	19.4	2.3	13.8	.2
4	134	58.5	14.0	65.2	13.1	6.7[a]	10.8	.6
5	46	59.2	11.5	64.0	9.1	4.8[a]	9.3	.5
6	138	58.7	14.2	61.1	15.3	2.4[a]	10.0	.2
7	53	64.3	12.7	62.4	14.0	-1.9	8.5	.2
8	48	48.6	12.6	52.6	10.6	4.0[a]	8.1	.5
Total	531	55.0	16.7	58.4	16.6	3.4[a]	11.1	.3

[a] These differences were statistically significant at $p<.05$.

- There was an overall statistically significant reading increase of 3.4 N.C.E.s from 1985 to 1986.
- Statistically, students in grades four, five, six and eight showed significant reading increases; the gains for grades four, five, and eight were moderately meaningful.

TABLE 6

Analyses of CIMS-CA Reading Achievement Scores
for C.S.D. 30: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
3	71	48.0	20.0	55.2	21.5	7.3[a]	16.8	.4
4	96	66.3	11.3	70.5	9.2	4.2[a]	8.7	.5
5	104	65.3	12.5	66.5	10.4	1.2	6.8	.2
6	64	66.8	21.2	65.9	17.4	-0.9	11.2	.1
7	21	44.9	5.7	51.4	10.4	6.5[a]	11.8	.6
8	53	68.7	7.4	69.9	7.6	1.2	6.2	.2
Total	409	62.2	16.7	65.1	14.9	2.9[a]	10.8	.3

[a] These differences were statistically significant at $p<.05$.

- o There was an overall statistically significant increase of 2.9 N.C.E.s from 1985 to 1986.
- o Students in grades three, four, and seven also showed statistically significant increases; the gains for grades four and seven were moderately meaningful.

TABLE 7

Analyses of CIMS-CA Reading Achievement Scores
in Assorted Districts: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
5	18	59.6	5.8	62.2	8.1	2.6	6.4	.4
7	41	62.0	8.5	63.4	7.3	1.4	6.7	.2
8	66	64.6	11.4	68.4	10.2	3.8[a]	8.8	.4
Total	125	63.0	9.9	65.9	9.4	2.9[a]	7.9	.4

[a] These differences were statistically significant at $p<.05$.

- There was an overall statistically significant increase of 2.9 N.C.E.s from 1985 to 1986.
- Students in grade eight showed a statistically significant increase of 3.8 N.C.E.s.

reading increases. These increases represented moderate effect sizes.

- o C.S.D.s 22 and 24 showed an overall statistically significant reading gain of 2.9 N.C.E.s. This represented a moderate effect size. Grade eight made a statistically significant reading increase of 3.8 N.C.E.s, which represented a moderate effect size.

Analyses of covariance were conducted to assess the significance of 1986 reading achievement test score differences among C.S.D.s 11, 15, and 30, and grades three through eight from all participating districts. The results showed that there was a significant difference in reading achievement among the different districts ($F = 7.49$, $p<.05$) and among different grades ($F = 5.85$, $p<.05$). These results indicate that, in general:

- o CIMS-CA students in C.S.D.s 15 and 30 performed better than those in C.S.D. 11; and
- o CIMS-CA students in grades three, four, five, and eight performed better than students in grades six and seven.

In general, with the exception of C.S.D. 11, all districts achieved overall statistically significant mean gains in reading scores when the spring 1986 scores of students from all grades were compared to their spring 1985 scores. These mean gains represented small to moderate effect sizes. By grade, the mean gains were somewhat more consistent for grades four, five, and eight than for grades three, six, and seven.

RESULTS IN WRITING ACHIEVEMENT

Table 8 reports the results of the overall comparisons of fall, 1985, and spring, 1986, writing achievement for grades one through eight. This table shows that there was an overall statistically significant writing mean increase of 11 points from the fall of 1985 to the spring of 1986 among CIMS-CA students. This mean increase represented a moderate effect

TABLE 8

Analyses of CIMS-CA Writing Samples for
all C.S.D.s Combined: 1985-1986

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.[a]	S.D. Mean Diff.	E.S.
1	64	9.9	10.6	39.5	23.7	29.6	21.9	1.4
2	60	25.4	19.1	44.1	19.6	18.7	21.9	.9
3	58	27.9	19.8	42.3	19.0	14.4	18.9	.8
4	60	49.2	22.4	56.4	20.8	7.2	16.4	.4
5	86	44.8	16.2	52.6	16.0	7.8	15.3	.5
6	60	49.5	15.9	55.1	12.7	5.6	16.4	.3
7	69	47.3	19.3	52.1	15.8	4.8	15.9	.3
8	76	59.3	12.4	62.5	13.5	3.2	14.0	.2
Total	485	40.0	22.8	51.0	19.1	11.0	19.3	.6

[a] These differences were statistically significant at $p<.05$.

- Overall, CIMS-CA students showed a statistically significant writing increase of 11.0 points. Each grade level made a statistically significant mean gain in writing from fall, 1985, to spring, 1986.
- Students in grades one, two and three showed large effect sizes; grades four and five showed moderate effect sizes, whereas the changes in grades six, seven, and eight represented small sizes.

size. There were also statistically significant mean gains for each grade. These gains represented moderate to large effect sizes in grades one through five.

Tables 9 through 12 present similar comparisons for grades one through eight in C.S.D.s 11, 15, and 30 and for assorted districts (22 and 24). As shown in these tables:

- CIMS-CA students in C.S.D. 11 showed an overall statistically significant writing mean gain of 9.4 points. This gain represented a moderate effect size. CIMS-CA students in grades one, two, three, and six made statistically significant mean writing gains, which represented moderate to large effect sizes.

- CIMS-CA students in C.S.D. 15 showed an overall statistically significant writing mean gain of 11.1 points. This gain represented a moderate effect size. CIMS-CA students in grades one, three, five, and eight made statistically significant mean writing gains, which represented moderate to large effect sizes.

- CIMS-CA students in C.S.D. 30 made overall statistically significant mean writing gains of 13.5 points which represented a moderate effect size. CIMS-CA students in grades one through five showed statistically significant mean writing increases. These increases represented generally large effect sizes.

- CIMS-CA students in C.S.D.s 22 and 24 showed overall statistically significant writing mean gains of 7.8 points, which represented a moderate effect size. CIMS-CA students in two of three grades in these districts, grades five and seven, made statistically significant gains. These gains represented moderate and large effect sizes, respectively.

Analyses of covariance were conducted to assess the significance of the spring 1986 writing sample score differences among C.S.D.s 11, 15, and 30, and grades one through eight from all participating districts. The results showed that there was no significant difference in writing achievement among the different districts ($F = 2.0$, n.s.), but there was a statistically significant difference in writing achievement among different grades ($F = 16.8$, $p<.05$). These results indicate that, in general:

TABLE 9

Analyses of CIMS-CA Writing Samples
for C.S.D. 11: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
1	20	9.3	12.2	38.5	22.9	29.2[a]	21.2	1.4
2	21	18.8	18.5	40.7	21.5	21.9[a]	23.3	.9
3	18	33.3	21.2	47.5	22.3	14.2[a]	19.0	.7
4	21	46.2	26.1	51.7	19.6	5.5	15.6	.4
5	26	41.0	16.1	42.5	10.4	1.5	15.7	.1
6	20	52.8	14.4	60.0	14.8	7.2[a]	11.8	.6
7	20	59.5	15.1	60.0	16.2	0.5	12.1	.0
8	20	60.3	11.3	58.3	12.48	2.0	13.6	.1
Total	166	40.2	24.3	49.6	19.3	9.4[a]	19.6	.5

[a] These differences were statistically significant at $p<.05$.

- Overall, CIMS-CA students in C.S.D. 11 made statistically significant writing gains of 9.4 points. This gain represented a moderate effect size.

- Students in grades one, two, three, and six showed statistically significant writing increases from fall, 1985, to spring, 1986. These gains represented large effect sizes for grades one, two, and three, and a moderate effect size for grade six.

TABLE 10

Analyses of CIMS-CA Writing Samples
for C.S.D. 15: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
1	24	9.8	10.2	34.0	21.4	24.2[a]	17.9	1.4
2	19	26.3	20.7	35.3	17.6	9.0	22.5	.4
3	20	24.5	18.8	38.3	19.8	13.8[a]	17.5	.8
4	20	45.0	21.0	52.3	26.3	7.3	17.7	.4
5	20	45.0	19.1	58.3	19.2	13.3[a]	17.3	.8
6	20	47.5	17.4	52.3	9.4	4.8	19.5	.2
7	19	34.0	22.4	40.0	14.2	6.0	19.5	.3
8	20	53.5	11.0	60.8	17.9	7.3[a]	14.1	.5
Total	162	35.1	22.6	46.2	21.1	11.1[a]	19.0	.6

[a] These differences were statistically significant at $p<.05$.

- Overall, CIMS-CA students in C.S.D. 15 made a statistically significant writing increase of 11.1 points. This gain represented a moderate effect size.

- Students in grades one, three, five, and eight showed statistically significant writing gains. These gains represented moderate (grade eight) to large (grades one, three, and five) effect sizes.

TABLE 11

Analyses of CIMS-CA Writing Samples
for C.S.D. 30: 1985-86

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
1	20	10.8	9.8	47.0	26.1	36.2[a]	25.9	1.4
2	20	31.5	16.6	56.0	12.9	24.5[a]	17.2	1.4
3	20	26.5	19.3	41.8	14.3	15.3[a]	20.9	.7
4	19	56.8	18.0	66.1	10.5	9.3[a]	16.4	.6
5	20	47.0	14.9	59.3	16.4	12.3[a]	14.4	.9
6	20	48.3	16.0	53.0	12.5	4.7	17.7	.3
7	13	48.1	14.4	49.2	11.9	1.1	17.9	.1
8	25	63.2	12.2	66.0	10.6	2.8	12.0	.2
Total	157	41.8	22.5	55.3	17.1	13.5[a]	20.9	.6

[a] These differences were statistically significant at $p<.05$.

- Overall, CIMS-CA students in C.S.D. 30 made a statistically significant writing increase of 13.5 points. This increase represented a moderate effect size.

- Students in grades one through five made statistically significant writing gains, which represented moderate to large effect sizes.

TABLE 12

Analyses of CIMS-CA Writing Samples
for Assorted Districts[a]

GRADE	N	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mean Diff.	S.D. Mean Diff.	E.S.
5	20	47.5	14.6	53.3	12.3	5.8[b]	10.3	.6
7	17	47.4	13.7	58.5	10.7	11.1[b]	12.1	.9
8	11	59.1	14.3	65.5	10.4	6.4	17.33	.4
Total	48	50.1	14.8	57.9	12.1	7.8[b]	12.8	.6

[a] These are C.S.D.s 22 and 24.

[b] These differences were statistically significant at $p<.05$.

- Overall, CIMS-CA students in C.S.D.s 22 and 24 made a statistically significant writing increase of 7.8 points. This increase represented a moderate effect size.

- Two of the three grades in these districts, grades five and seven, showed statistically significant writing gains. These gains represented moderate to large effect sizes.

- CIMS-CA students performed similarly well in C.S.D.s 11, 15, and 30.

- CIMS-CA students in grades one through three performed better than students in grades four through eight.

VI. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The goal of the New York City Board of Education's Comprehensive Instructional Management Systems-Communication Arts (CIMS-CA) project is to develop a holistic communication arts curriculum and staff development program which reflects the most recent research for kindergarten through the eighth grade, a corresponding test component, and a computer management system. Both the curriculum and the test component have been developed by teachers and both attempt to include all four communication arts content areas -- reading, writing, listening, and speaking.

During the 1985-86 school year, CIMS-CA operated in C.S.D.s 11, 15, and 30. In addition, C.S.D.s 13, 18, 20, 21, and 24, as well as several non-public schools, were informally affiliated with the project. Implementation of a newly developed junior high school curriculum and assessment component took place in 1985-86. A drama component for grades four through eight was also added this year.

The purpose of this evaluation was to document the level and quality of program implementation and to assess the program's impact upon student achievement in reading and writing. The findings for 1985-86 summarized below show that the CIMS-CA project was successfully implemented both on the elementary and the junior high level.

The major conclusions of the evaluation are as follows:

- Overall, participating students made statistically significant gains in holistically scored writing samples in grades one through eight. These gains were educationally meaningful for grades one through five. CIMS-CA students showed statistically significant reading gains on citywide standardized tests in grades three, four, five, and eight.

- Teachers found very helpful both the staff development workshops on curriculum use and the observations and demonstration lessons of the site visits. Most teachers thought the assistance from project staff very helpful. Cited as a major strength of the project was the concept of project teachers helping other project teachers, both in workshops and in the schools. Teachers felt that administrator participation needs to be strengthened; in schools where administrators were involved, the project functioned more effectively.

- The inclusion of grades seven and eight in the project proceeded smoothly. In C.S.D. 15, the assessment component for the junior high school curriculum was piloted -- the results will be analyzed during the summer of 1986. In C.S.D.s 11 and 30 the curriculum was used without the assessment component. Junior high school teachers were positive about the use of the CIMS-CA curriculum and their participation in staff development activities.

- Curriculum revision for grades four and five was completed, with a review of the revision scheduled for summer, 1985. The revision will be ready for implementation in the 1986-87 school year. An accompanying assessment component was included in the revision.

- The computer management system was implemented. This system will facilitate scoring of assessment tools so that teachers may obtain results more quickly than in the past. These results will be used in the continuing curriculum revision process, so that the CIMS-CA curriculum will draw on the most recent data available.

- The first year of the drama component was extremely successful for both teachers and students. The drama component appeared to be a unique educational tool stressing the learning of listening and speaking skills. Field trips to both watch and perform The Tempest were found to be both educational and enjoyable.

- The number of students, teachers, and supervisors/administrators participating in the program has significantly increased. This increase was a result of both the inclusion of the seventh and eighth grades in the project and the increase in recruitment efforts on the part of the CIMS-CA project staff.

RECOMMENDATIONS

Based on these findings, the following specific recommendations are made:

- Continue to regularly evaluate and revise the curriculum.

- Continue to directly involve teachers in curriculum and assessment-instrument design.

- Continue to maximize staff development by providing more presentations by outside experts, demonstration lessons, and classroom visits by field managers. Continue weekly, bi-weekly, and summer workshops.

- Increase efforts to recruit more school staff into the project so that individual teachers gain additional support from colleagues and supervisors. Encourage more supervisor/administrator involvement.

- Continue to monitor distribution and implementation of curriculum materials and assessment instruments so that their appropriate use can be assured.

- Plan, extend, and implement a second year for the drama component.